animals from the eggs. It is thus that Claparède, in his 'Beobachtungen über Anatomie und Entwicklungsgeschichte wirbelloser Thiere an der Küste von Normandie angestellt' (pp. 63–69, pl. viii. figs. 12, 13, and pl. ix.), describes and figures, as stages in the evolution of *Terebella conchilega*, some young Annelids which really have no genetic connexion with this type.

M. Giard has recently found the same Annelid at Wimereux. It lives in the adult state upon the Hydroid *Laomedea gelatinosa*, on the branches of which small transparent projecting tubes may often be found, although, as they exactly imitate the gonothecæ of the Hydroid, they may easily escape observation. Each tube is inhabited by a pretty transparent Annelid, which only differs from the supposed embryo of *Terebella conchilega* (Claparède, pl. ix. fig. 6) by having its seven tentacles nearly of equal length, at least the median one does not nearly so much exceed the six lateral tentacles in length. The presence of the generative products in many individuals proves that they are adult. The existence of voluminous otocysts precisely like those of Mollusca, and the arrangement of the *tori uncinigeri* at the extremity of the ventral cirri of the posterior part of the body, lead to the location of this Annelid in a new genus much further removed from the *Terebellæ* than might be supposed, and presenting affinities with several families of Polychæta. This genus M. Giard names *Wartelia*, in honour of one of his pupils, M. Adolphe Wartel, who discovered the Annelid on the *Laomedea* at Wimereux; the species is named *W. gonotheca*, in allusion to the curious mimicry above mentioned. The arrangement of the tubes of *Wartelia* also gives them a certain resemblance to the tubicolar Rotifera.

This discovery leaves the embryogeny of *Terebella conchilega* completely unknown; and the best observations which we possess on the development of *Terebella* are those of Milne-Edwards on *T. nebulosa*, Mont.

Wartelia is probably allied to a tubicolar Annelid of the Mediterranean described by Busch*, and to the genus *Lumara* of Stimpson†. Perhaps also the larva figured by Agassiz ‡ as the embryo of *T. fulgida*, Ag., is the embryo of a form allied to *Wartelia*.—*Comptes Rendus*, May 6, 1878, p. 1147.

On the Molluscan Fauna of New Guinea.

By M. C. Tapparone-Canefri.

The author gives the following as the results of his examination of the Papuan Mollusca and especially of a fine collection of 320

* Beob. über Anat. und Entw. einiger wirbell. Seethiere (Berlin, 1851), p. 71, pl. xi. fig. 7.

† Marine Invertebrates of Grand Manan, p. 30.

‡ "On the Young Stages of a few Annelids," Ann. Lyc. Nat. Hist. New York, vol. viii. pp. 320, 321, pl. vii. figs. 19, 19*a*.

species formed at Port Dorey by M. Raffray and now in the Paris Museum.

Five sixths of M. Raffray's collection consist of marine Gasteropods; a few terrestrial Pulmonata and fluviatile forms and eighteen Bivalves complete the collection.

Among the marine shells nearly all the great Lamarckian genera are represented. The genera *Conus*, *Mitra*, *Turbinella*, and *Strombus* are the richest; but there are also a good many species of *Cerithium*, *Purpura*, *Ricinula*, *Nassa*, *Columbella*, *Triton*, *Ranella*, *Murex*, *Ovula*, *Cypræa*, *Trochus*, and *Turbo*. On the whole these shells show clearly that the Papuan marine molluscan fauna is closely related to the great fauna of the Indo-Pacific region, and especially to that of the Moluccas.

The terrestrial molluscan fauna of New Guinea has a more special character and appears to be much more related to that of the islands of Oceania, the Solomon and Admiralty Islands. The forms and the types are the same, although the species are different. This view is confirmed by the few terrestrial species in M. Raffray's collection. Nearly all the *Helices* must be placed in the groups *Papuina*, *Geotrochus*, *Cloritis*, and *Albersia*, and *Leptopoma* predominates among the Operculata.

In this collection there are two interesting forms which the author regards as quite new. One of them forms the type of a new genus, which the author names *Perieria*, after Professor Perier, and characterizes as follows :—

Genus Perieria.

Testa sinistrorsa, fusiformis, multispira, apice truncata: apertura elliptica; peristoma continuum, expansum; axis sinuosus, basi contortus et columellam truncatam atque subdentatam simulans.

This genus approaches *Clausilia*; but the want of folds in the columella, the false tooth at its base, and the truncation of the spire serve to separate the two genera. The species is

Perieria clausiliæformis, Tapp.-Can.

P. testa anguste fusiformi, crassiuscula, satis nitida, fusco-cornea, dorso (an fortuite?) albescente, peristomate pallidiore. Spira turrita, supra medium attenuata, apice decollata. Anfractus $7\frac{1}{2}$, regulariter crescentes, convexo-planulati, oblique et confertim per longitudinem inciso-striati, sutura impressa, subcrenulata sejuncti; ultimus major, basi subovatus. Apertura pyriformis, superne angustata, peristomate incrassato continuo. Alt. 0·065, lat. 0·012 m.

A new species of *Helix* is described as follows :—

Helix Raffrayi, Tapp.-Can.

H. testa latissime et profunde umbilicata, orbiculato-pyramidata, acute carinata, sub lente crebre per longitudinem striata, dia-

phana, corneo-cinerea, carina fulvescente, apice obtusiusculo. Anfractus 10½, exsertiusculi, plani, sutura impressa, marginata divisi; ultimus valde convexus, ad umbilicum subangulatus, ad aperturam deflexus, disjunctus et subconstrictus; umbilicus maximus, conicus, apertus, anfractus omnes ostendens. Apertura rotundo-lunata, peristomate continuo, incrassatulo, undique expanso. Alt. 0·005½, lat. 0·010 m.

Comptes Rendus, May 6, 1878, p. 1149.

On a remarkable new Generic Type of Characins.

By Theo. Gill.

More than ten years ago I discovered and laid aside in the museum of the Smithsonian Institution a specimen representing a previously unnamed genus of Characins, which was strikingly distinct from any recognized by other naturalists. I delayed the announcement in the hopes of being able to publish it in connexion with a revision of the whole family; but I deem it now expedient to introduce it without further procrastination. The genus may be called and distinguished as follows:—

Elopomorphus.

Curimatine Characinids with an elongated fusiform body; rounded belly; conic head with the operculum very oblique; mouth terminal and apparently transverse, but capable of considerable distention, the supramaxillaries being quite movable and the mandible inserted under the eye; the margins of the jaws trenchant; teeth none; the dorsal median and above the ventrals; the anal short; the gill-arches acutely bent and with prolonged limbs, and the gill-rakers very numerous and setiform.

Elopomorphus Jordanii.

The height of the body is contained about five times and a third in the (extracaudal) length, the length of the head rather more than three times and a half; the eyes are covered with a membranous coat; there are about 100 scales in the lateral line, and seventeen rows between the back in front of dorsal and the lateral line.

D. 11, A. 11, P. 10, V. (1) 12.

The colour, in alcohol, is rufescent and without decided markings.

The single specimen in the Smithsonian collection was obtained many years ago by Lieut. Gibbon from the Marmore River in Bolivia.

The *Anodus elongatus* of Spix seems to be a congeneric but quite distinct species.—*Field and Forest*, May 21.